

CLASSIFICATION **S-E-C-R-E-T**
 SECURITY INFORMATION
 CENTRAL INTELLIGENCE AGENCY
 INFORMATION FROM
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

50X1-HUM

CD NO.

COUNTRY

USSR

SUBJECT

Scientific - Chemistry, new books

DATE OF
INFORMATION

1951

HOW

PUBLISHED

Monthly periodical

DATE DIST.

2 MAY 1952

WHERE

PUBLISHED

Moscow/Leningrad

NO. OF PAGES 4

DATE

PUBLISHED

Dec 1951

LANGUAGE

Russian

SUPPLEMENT TO
REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
 OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 50
 U. S. C., 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION
 OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PRO-
 HIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE

Zhurnal Prikladnoy Khimii, Vol XXIV, No 12, 1951, pp 1326-1328.

WORKS ON CHEMISTRY IN PUBLICATIONS
OF SOVIET INSTITUTES AND UNIVERSITIES

O. Zvyagintsev

The articles listed below are from Zvyagintsev's selected list (with comments) of articles on applied chemistry and chemical technology which appeared during 1950 and 1951 in some publications of scientific and technical organizations that are not noted in any USSR indexing journal.

1. "Works of the Institute of Chemistry, Academy of Sciences Latvian SSR" (Trudy Instituta Khimii Akademii Nauk Latvviyskoy SSR), Vol I, Riga, 1950, (in Russian and Latvian languages).

[Of 14 articles listed by Zvyagintsev, the following are of interest:]

a. N. Brakhs and associates: four articles relating to the investigation and utilization of sapropelite and sapropelite tar.

b. A. Shmids, "Oxidation of Colloidal Metals by Oxygen in the Air." This extensive work, carried out under the guidance of Prof L. K. Lepin', presents a new, rapid method for investigating the corrosion of metals in solutions of different substances. Lepin' studied the oxidation of cadmium, lead, antimony, and copper sols in the presence of various electrolytes including KCl, KBr, KI, KNO₃, K₂SO₄, Na₃PO₄, NaOH, NH₄OH, HCl, H₂SO₄, CH₃COOH,

2. "Works of the Central Asia Polytechnic Institute" (Trudy Sredneaziat-skogo Politehnicheskogo Instituta), No 2, Tashkent, 1950

[Of nine articles listed by Zvyagintsev, the following are of interest:]

- 1 -

STATE		CLASSIFICATION		DISTRIBUTION											
ARMY	<input checked="" type="checkbox"/>	NAVY	<input checked="" type="checkbox"/>	NSRB											
	<input checked="" type="checkbox"/>	AIR	<input checked="" type="checkbox"/>	FBI											

S-E-C-R-E-T

50X1-HUM

a. A. B. Kuchkarova, "Syntheses With the Aid of Zinc Chloride." Concerns the condensation of aromatic compounds (benzene, toluene, tetralin,) with propyl, isopropyl, and benzyl alcohols in the presence of zinc chloride.

b. V. N. Fiseyskiy and Ya. M. Tur'yan; an article devoted to the oxygen overvoltage on a smooth electrolytic nickel coating in an alkaline solution.

3. "Symposium of Works of the Scientific Research Institute of Building Materials" (Sbornik Rabot Nauchno-issledovatel'skogo Instituta Stroymaterialov), No 1, Minsk, 1950.

[Four of the nine articles in this symposium concern the utilization of local raw materials for production of building materials. Positive results were obtained.]

4. "Works of the Kazan' Chemico-technological Institute imeni S. M. Kirov" (Trudy Kazanskogo Khimiko-tekhnologicheskogo Instituta imeni S. M. Kirova), No 15, Tatgosizdat, Kazan', 1951

[Of 25 articles, the following are listed by Zvyagintsev as being of interest to readers of Zhurnal Prikladnoy Khimii.]

Articles on organophosphorus compounds:

a. A. Ya. Arbuzov and A. I. Razumov, "Certain Esters of Allylphosphonic [?] Acid."

b. A. I. Razumov, V. Kukhtin, and N. Sazonova, "Interaction of Certain Halogen Compounds of Phosphorus With Esters of Glycolic Acid."

c. Gil'm Kamay and Yu. A. Gerasimova, "Action of the Chloride of Phenylphosphorous Acid on Organomagnesium Compounds."

d. Gil'm Kamay and N. A. Chadayeva, "The α , α' , α'' -Triallyltriethylene Ester of Phosphorous Acid."

e. V. S. Abramov and S. N. Kofanov, "Interaction of Halogenides of Dialkylphosphorous Acids With Phosphates."

Articles on inorganic chemistry:

f. L. I. Kuznetsov-Fetisov and E. B. Krasnyy, "Preparation of Magnesium Perchlorate Under Laboratory Conditions."

g. A. D. Tritskaya, "Complex Compounds of Divalent Platinum with Phosphorus-Containing Added Groups."

h. A. Sh. Valeyev, G. S. Vozdvizhenskiy, and V. A. Dmitriyev, "Problem of the Electrolytic Polishing of Heterogeneous Alloys."

Articles on colloidal chemistry:

i. A. F. Gerasimov, "Problem of the Constitution of Collargol Particles."

j. A. F. Gerasimov, "Preparation of 'Golden' Silver From Collargol."

- 2 -

S-E-C-R-E-T

S E C R E T

50X1-HUM

k. V. N. Nikulin, "Problem of the Kinetics of the Reaction Between Silver Hydrosol and a Solution of Halogen Salts."

Articles on other problems:

1. K. N. Mochalov and V. A. Dmitriyev, "Cracking of Methane-Hydrogen Mixtures by Means of a High-Frequency Focal Discharge."

2. Ye. I. Aleksandrova, "Microanalysis of Natural Waters (Determination of Calcium and Magnesium)."

Articles on the history of chemistry:

n. G. S. Vozdvizhenskiy, "New Chemical Elements -- the Brilliant Scientific Foresight of D. I. Mendeleev."

o. V. V. Nesmelov, "Certain Data on the Role of the Kazan' School of Chemists in the Founding and Development of the Domestic Chemical Industry."

5. "Works of the Leningrad Order of the Labor Red Banner Technological Institute imeni Leningrad Sovet" (Trudy Leningradskogo Ordona Trudovogo Krasnogo Znaniya Tekhnologicheskogo Instituta imeni Leningradskogo Soveta), No 19, Goskhimizdat, 1951.

The entire issue is devoted to work of N. N. Kuchalov, V. G. Voanov, and A. G. Korolev on glass-polishing rouge.

6. "Works of the Azerbaydzhan State University imeni S. M. Kirov, Chemical Series" (Trudy Azerbaydzhanskogo Gosudarstvennogo Universiteta imeni S. M. Kirova, Seriya Khimicheskaya), No 1, Baku, 1951.

A symposium devoted to Academician N. D. Zelinskiy on the occasion of his 90th birthday. The eulogy, as well as four articles devoted to Zelinskiy's work on petroleum and stereoisomerism, are in the Azerbaydzhan language. Other articles are as follows:

a. V. I. Tikhomirov and V. Ye. Popova, "Catalytic Properties of Bentonite Clays of Azerbaydzhan and Georgia."

b. I. S. Sattar-Zade and A. V. Frost, "Conversion of Organic Compounds Over Aluminum Catalysts" (Communication No 6).

c. Ch. I. Zil'fagariy, "Chemical Composition of Petroleum Ash" (in the Azerbaydzhan language).

d. M. K. Akhmedli and E. M. Bashirov, "Determination of the Quantity of Unsaturated Hydrocarbons in the Composition of the 100-120° Fraction of the Product of Pyrolysis of Kerosene."

e. M. K. Akhmedli and E. M. Bashirov; A second article on these authors is devoted to the isolation of olefinic and diolefinic hydrocarbons from the 105-108° fraction resulting from the pyrolysis of kerosene.

f. Sh. Mamedov and G. Mamedov, "Synthesis of Dialkosemi-Derivatives of Acetoacetic Acid and Its Alkyl-Derivatives."

g. Sh. Mamedov and G. Abdumayev, "Synthesis of Unsaturated Ethers of Methylene Glycol."

- 3 -

S E C R E T

S-E-C-R-E-T

50X1-HUM

h. P. M. Romanova, "Synthesis of Hydroxyacetals by the Alcoholysis Method."

i. I. G. Alizade, "The Use of Dihydroxy-Substituted Ethers for Synthesis of Symmetrical Esters of Keto-Carboxylic Acid Derivatives."

j. S. Guluzade and A. Nazirov, "Synthesis of the Incomplete Ester of Ethylene Glycol With the Help of Ortho-Silicic Acid."

k. S. D. Gusseyinov and A. I. Agayev, "Ozone Method for Preparing Iodine From Oil-Well Waters in Weak Sulfuric Acid."

l. A. I. Agayev, "Preparation of Silver Nitrate From an Alloy of Silver and Copper."

7. "Works of the Moscow Institute of Chemical Machine Building" (Trudy Moskovskogo Instituta Khimicheskogo Mashinostroyeniya), No 1 (9), "Sovetskaya Nauka" Press, Moscow, 1950.

[Of nine articles in the symposium, Zvyagintsev lists the following as being of the greatest interest:]

a. B. N. Rutovskiy, G. S. Goncharov, and Ya. G. Muravin, "Problem of the Mechanism of Heterophase Polymerization." The authors describe their method for studying and characterizing heterophase polymerization by coloring the monomer with a dye which is insoluble in the dispersing medium.

b. A. N. Levin, "Intensification of the Process of Vinyl Chloride Polymerization." The process is accelerated by certain admixtures and by determination of the optimum regime.

c. I. Ya. Klinov and M. S. Vezhenkova, "Corrosion in the Brine Pipe of a Soda Plant and Its Elimination."

- E N D -

- 4 -

S-E-C-R-E-T